DOCUMENT RESUME

ED 303 773 CS 009 512

AUTHOR Greif, Ivo P.
TITLE A Sequel to the Phonics Utility Research Series: That Candles May Be Lit and Changes Wrought in Reading Instruction.
PUB DATE 88
NOTE 36p.
PUB TYPE Reports - Evaluative/Feasibility (142) -- Guides - Classroom Use - Guides (For Teachers) (052)

EDRS PRICE MF01/PC02 Plus Postage.
DESCRIPTORS Educational Assessment; Elementary Education; Grammar; *Oral Reading; *Phonics; *Pronunciation; Reading Achievement; *Reading Failure; *Reading Instruction; Reading Research; Reading Strategies; Student Evaluation; Vocabulary Development

ABSTRACT

Reading failure can be eliminated by the year 2000 if reading teachers believe it can be done, can develop the new procedures needed to make their dreams come true, and are willing to make fundamental changes in how they teach reading. Phonic utility research clearly indicates that phonics instruction is neither dependable nor useful. The current definition of reading is that pronunciation is the basic essential in reading and reading involves changing printed words to speech. Yet all would agree that reading is a part of communication, so a better definition of reading is that reading is receiving written communication. Specific requirements for teaching reading as newly defined include: (1) discontinue the use of pronunciation in instruction, evaluation, vocabulary work, and as an achievement goal; (2) teach about phonics, not phonics; (3) discontinue the use of oral reading as an assessment tool; (4) substitute story telling for oral reading; (5) develop in children a large, experience-based vocabulary which focuses on the meaning of words; (6) help children learn to identify the grammar in what they read; (7) develop ways of assessing reading which do not require oral reading; and (8) teach children how to speak the language apart from reading instruction. More money and time should be spent to develop new models, instruction to prevent failure, and to establish new goals, procedures and principles of teaching to eliminate reading failure entirely. (Twenty-four references are attached.) (RS)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED303773

A Sequel to the Phonics Utility Research Series: That Candles May Be Lit and Changes Wrought in Reading Instruction

PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

Ivo P. Greif

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

☐ This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

by

Ivo P. Greif, Ed.D.

Professor of Education--Reading

Illinois State University

Normal, Illinois 61761

CS009512

A Sequel to the Phonics Utility Research Series:

That Candles May Be Lit and Changes

Wrought in Reading Instruction

Copyright © 1988 by Ivo P. Greif, Ed.D.
All Rights Reserved

Phonics Utility Research, Briefly

In the past three decades, a dozen or more research articles on phonics utility were published in professional journals. In the 1960's and early 1970's, The Reading Teacher alone published a series of six or more such articles. In the 1980's, Greif reported on eight research projects on phonics utility. Please see the bibliography.

All of those reports showed that the most commonly taught phonics rules involving vowels, as well as two commonly taught rules for syllablizing words, have very, very low dependability. For example, the rule for a) pronouncing adjacent vowels, and the rule for b) a vowel followed by a consonant and a final e, give correct pronunciation about 15% and 55% of the time, respectively. Several other rules involving vowels, even when reworded to clarify their application (which improved their dependability) were found to produce correct pronunciation about 67, 50, 19, and 5% of the time, when applied to all pertinent one, two and three syllable words listed in an advanced dictionary. All those percentages were **obtained on the condition that no errors** were made **in syllablizing** when syllablizing was needed, **nor** in applying **other phonics rules**. The two most popular rules for syllablizing were found to produce correct syllables less than 40% of the time in over 25,000 two-syllable words.

Two studies involved some 700 college students who were brought up on a phonics and/or pronunciation based reading program. They were to indicate whether they knew the pronunciation and meaning of some 280 words selected from two pages of one issue of a daily newspaper and one issue of Reader's Digest. They correctly could pronounce only 50% of the words they said they could, and knew a meaning for only 19% of the words for

which they indicated they knew a meaning (of the 280 words, there were some they said they could not pronounce, and many more for which they said they had no meaning.).

It should be noted here that, if the vowels in the words are not pronounced correctly, the word is mispronounced. Therefore, other phonics rules that deal with elements other than vowels are of little, if any, help regardless of their utility, which however, is another story.

Most of the articles in the series on phonics utility published in The Reading Teacher dealt with 45 phonics rules, many of which showed very low utility, and/or pertained to very few words and were therefore seldom used.

Would Sub-Generalizations Improve Phonics Rules?

Some persons have suggested that sub-generalizations should be made to use with words that do not conform to a given rule, for example, the adjacent vowel rule. Two studies help provide information on the usefulness of sub-generalizations in making phonic rules work better.

In the first study, Lou Burmeister did an extended study on adjacent vowels, which I urge you to read. Burmeister (1968)) used a list of 17,130 words in which were found 3,738 sets of adjacent vowels, in 26 different combinations, and these 26 combinations had a total of 96 different pronunciations. If sub-generalizations of the adjacent vowel rule were made for these words, there would be 26 of them, listing a total of 96 alternatives. Even then, if these were used correctly, Burmeister indicated that only 909 of those 3,738 words would be pronounced correctly 80% of the time. That is 24% of them. These figures presume that no errors would be made in

syllablizing or applying other phonics rules. Is there even one teacher anywhere who knows (or even cares to know) what those 26 sub-generalizations with 96 alternatives are? Likewise, which alternatives are more likely than others? Who would claim to be helping children learn to read by teaching those sub-generalizations and requiring their use? Sadly, the large majority of teachers would so claim.

The second study was done by this writer. In that case, he originally did a research project on the utility of the phonics rule, "When there are two vowels in a word, one of which is a final e, the first vowel is long and the e is silent." (Greif, 1980). This study indicated a utility of about 53%. This result was met with disbelief, hostility, anonymous letters of ridicule, and of course, suggestions to use sub-categories of words, or sub-generalizations. Several years later this study was re-done (Greif, 1987).

In this second study, the pertinent words were grouped into 9 rather clear sub-categories. There appeared to be 3 ways of grouping the 9 sub-categories. The original study was repeated word for word using the same dictionary as the word source as was used in the original study, except the words were grouped as above.

With the exception of one sub-group of 558 words which had 74% utility for the rule, the other 8 sub-groups (totaling over 8,200 words) had utilities of 46, 54, 23, 6, 0, 0, 52, and 10%. The percent of utility for the 3 larger groups of 796, 1,090 and 7,658 words, was 59, 43 and 47% respectively. Again, these results presume no other phonic errors were made. The original 53% utility for the total group in the 1980 study was quite close, and even generous.

Generally, sub-grouping does not make the rule work better on the sub-grouped words than when they are in one large group. In this case,

subgeneralizations improved the utility for two groups of 558 and 796 words, but even then, the utility was below the minimum 75% set by Clymer and accepted by the other researchers. Rather, breaking the 8,200+ words into 9 or more categories only serves to compound the confusion--as Burmeister's study also indicates.

Burmeister's research evidence supports by my own research, and my observation, that the words on which rules do not work are a widely varied assortment of words. In all of my research projects, I did note several exceptions, for example, these exceptions to the adjacent vowel rule, tion and sion. Several separate rules of apparent high utility could be made for these.

All of the phonic utility research done in the past 30 years clearly warrants the conclusion that children should not be taught phonics rules to use in their reading.

If Not Phonics, Then What?

If we do not teach phonics, then there is the question of what to do instead. What other approaches or methods are there?

A survey of the history of reading instructions indicates we've known only two apparently different approaches: **one of them** is some form of phonics instruction which involves pronouncing words using alphabetic-symbol/speech-sound relationships. The **other** is the whole-word approach, often humorously maligned as the "look-say" method. It involves pronouncing the whole word as recalled from memory, preferably instantly upon seeing the word.

While there appears to be differences in these two, it is important to note that these two approaches are **fundamentally the same**, in that they **both**

require the child to pronounce to read. Only the **way** in which the child arrives at the pronunciation differs.

Neither approach has been very successful. As they have been implemented, neither approach provides the child with **meaning** vocabulary development, which is a *sine qua non* for reading. Phonics isn't designed to produce meaning, only some phonically possible pronunciation. As teachers implement the whole word approach, it focuses on pronunciation. I believe it is the **implementation** of the whole word method that has caused its lack of success.

We have the research on phonic utility. Where is the research that demonstrates that pronouncing words is essential to reading? Just try to find even one study. Where is the research on the effectiveness/non-effectiveness of the whole word approach?

I fear we have held some convictions a) about both phonics and the whole-word approaches, b) on the need for pronunciation in reading, and even on c) what reading really is, which are not based on facts, nor research evidence at all.

Three Possible Shifts in Emphasis

One alternative is to modify the phonic approach so it does work perfectly. Since phonic generalizations are at the mercy of our spelling **non-system**, such a modification that would require a change in spelling so there would be one alphabetic symbol for each speech sound and **never** any deviations. Who is willing to adopt a spelling system done by, for example, an **improved** i.t.a. so it is really one symbol, one sound? Why not? Suppose for a moment that we did. There would then be only **45 simple phonic rules with no exceptions**--give or take a rule or so. It would require

uniform pronunciation across the land, and particularly, common agreement on which symbol related to which sound. Any average third grader easily should be able to know and apply those 45 simple rules. If so, he could pronounce all the words in an advanced college chemistry, physics, psychology, math and/or philosophy books **printed in that alphabet** without a single mistake! But would he **understand** anything? Maybe we should re-examine our notion of what reading is!

A **second alternative** is to modify the whole-word approach so that it becomes so effective we no longer need any special reading programs for anyone except those who are intellectually handicapped. The modification would change the whole-word approach to **look-think**, with the focus exclusively on meaning.

A **third alternative** is to develop a new approach entirely. After all these years with hundreds and hundreds of millions of dollars spent on reading, we don't have any idea what such a program would be. In fact, most reading teachers don't believe we **need** a new approach. Why is it that we seem convinced it is either whole-word, or phonics, neither one of which, as we've been implementing them, has produced effective results for almost half our children in this century?

Which one of these, or other alternatives we will pursue, if any, depends on how it is that we define reading.

On Defining Reading

It is in order here to consider **our current definition** of reading. An analysis of a) reading methods books, b) reading tests, c) teaching approaches and instructional materials, and d) classroom teachers' means of

evaluating children's reading, give good insight into our definition of reading.

About eight years ago, I had the members of several graduate classes locate the definition of reading used by the authors of almost 50 **reading methods books**. Not one found a definition which did not require the child to learn to pronounce words. In one case, the first line of the introduction were the words, "The **audience** for whom this book is written . . . ." In another case, reading was very simply defined as the process of changing printed words to spoken words. No one used a communications based definition.

Each year for the past eight years, I have also had class members select **reading tests** which they analyzed and evaluated, and reported to class. Since students selected tests from a holding of well over 100 tests, a wide variety of tests were therefore analyzed. In all that time, every single test we studied was based on the notion that pronunciation was essential to reading, and in almost every test, from about one-half to almost all of the subtests dealt with or required either a knowledge of pronunciation, or the ability to figure out the pronunciation. Indeed, in some cases, the vocabulary tests required that the child merely pronounce the word, or indicate by some silent activity something about knowledge of pronunciation. In some few cases, some indication that meaning was known was also required.

Robert Aukerman, in his recent book, listed, classified, and described 164 **reading teaching approaches and their materials** (1984). He lumped all the basic series into one approach, which he named the whole-word

approach.[1] Of the 164 approaches, he lists 94 of them as phonic, phonic linguistic, or coded sound/symbol approaches. Obviously they require pronunciation. Of the 60 some remaining approaches, in all but five of them, pronunciation was prominently and substantially involved as one of several student achievements and/or activities. **Not even one** was designed to use **no pronunciation** at all. All but five of the approaches Aukerman listed were built according to the same notion: that reading involves changing printed words to spoken words.

Most teachers consider any child who can change the printed words to spoken words without errors to be a good reader. That is evidenced by **what teachers do to evaluate children's reading**. They use oral reading, and they look for these indicators, usually in this order of importance: 1) pronunciation accuracy; 2) vocal expression (which, if present, is assumed to assure comprehension); 3) fluency (no jerkiness); and 4) reasonable speed. If all of the other three are excellent, but pronunciation is poor, you know that the grade will be low. If, however, the pronunciation is excellent, but the other three are somewhat weak, the grade will be much better, won't it? There is **nothing** in oral reading which is a **dependable indicator** of the quality of comprehension.

It readily seems apparent from an analysis of a) reading methods books, b) reading tests, c) teaching approaches and materials and d) classroom practices for evaluating reading performance, that all four point to the same

---

[1] This author examined the K-8 Scope and Sequence book of one of the most widely known basic series, not generally thought to be phonics oriented, but look-say. In 56 pages there were 30 pages (8 1/2 x 11 size) **filled** with phonics elements and pages in the basic series that emphasized them. In contrast, there were but 3 pages for vocabulary. This information almost exactly fits the Scope-Sequence distribution of **two other** widely used basic series, subsequently examined. Aukerman should not have considered **these** three basic reading programs, at least, as being whole-word approaches.

conclusion about our current definition of reading: Pronunciation is the basic essential in reading and reading involves changing printed words to speech.

We have attempted to implement that definition either by an analytic or synthetic approach to produce pronunciation (mainly by phonics, with some structural analysis) or by having children memorize the pronunciation of words, which is then used in an automatic stimulus-response fashion (look-say). In fact, it is not at all uncommon to encounter the notion that since all printed material is speech written down (encoding), reading is changing the printed material back to speech (decoding). However, if you ask authors, they will not say that printed material is speech written down.

The definition of reading which we have been using, like most of what we have been doing to teach reading, seriously has never been challenged.

A challenge is in order, and when it is made, I believe we will find the definition we've been using to be not only without any basis in research, but clearly unrealistic as well.

A New Definition of Reading

The first concern when defining reading is to decide whether or not reading is part of the communication process. Everyone I have ever asked has believed that **reading is part of communication**. It is universally regarded to be self-evident that reading is a part of communication. The second concern is, what is the nature of that part.

In communication dealing with the **word language**[1], there are only **two forms**, namely, the vocal and the graphic. There are **two activities** we can

[1] I do not include body language or sign language as word language in this treatment.

perform with **each** of the forms, namely, sending and receiving.[2] These statements result:

a) when you **send** the **vocal** form, you **pronounce words or speak**;

b) when you **receive** the **vocal** form, you **listen**;

c) when you send the **graphic** form, you **write**.

d) when you **receive** the **graphic** form, you **read**.

The **definition of reading** is, therefore, this: *Reading is receiving written communication.*

As you can see, all communication which involves **pronunciation** is **sending** the **vocal** form. But **reading**, as you can also see, is **receiving** (not sending) the **graphic** (not the vocal) form. **Receiving** is a common element in b) and d), **graphic form** is the common element in c) and d). Yet for most of this century, we have disregarded almost completely the receiving and graphic relationships to reading, and based our programs of instruction on **sending** the **vocal** form, which is **not related to reading at all**.

"Reading" which changes printed words to spoken words, in reality **avoids reading** because it provides for the message to be gotten by speaking and listening instead. It seems unlikely that we should recommend changing reading (which is a visual task) to an auditory task when almost everyone with average vision and hearing ability has a clear and high preference for the visual mode of taking in information. But we do, with vigor and persistence, teach children to change a visual task into an auditory one in reading.

---

[2] We can also think with those forms, but we rarely do so, as is evidenced each time we have a notion clearly in mind but are at a loss for words to express it, like man, well, uh, you know what I mean, don't you see, you know, and things like that, and everything, etc., and such and such, and this and that, and other indefinite referrants.

Likewise, it seems unlikely in these days of easy, economical means of transmitting the spoken word via telephone and tape recordings, that we would print spoken messages so that someone else could receive them by changing the printed words to spoken words, and listening. Yet, we have insisted that the printed word represents a spoken word, and that written or printed materials are speech written down. Actually, very little of what is printed was spoken first, unless, of course, authors dictate aloud to themselves so they know what to write. But we know they don't, and they say they don't.

Children simply **do not learn**, and cannot be expected to learn, to **receive** the **graphic form** of communication **by being taught to change print to speech** so they can **send the vocal** form, instead. Many children with average intelligence or above, learn to read despite such teaching, however. They simply disregard the teaching as much as they can and go about learning to read very much like they learned to listen, which was listen-think with **no** analytic procedures, or changing of forms. But the lower half of the class depends heavily on the teacher's instruction, and they are the ones who do what the teachers say, and as a consequence, fail to learn to read efficiently, a considerable number hardly at all.

In receiving communication, the nature of the message received is also important. In our effort to use context analysis, we often ask the children, "What would make sense to you here?" But, it is the **sender** who determines the nature of the communication that is to be received.

Just ask **any** sender of **any** form of communication, whose version of the message it is that he intends to be received, a) the one he had in mind before he chose the words he used, or b) the receiver's version because it is the best the receiver can do, or it is the message the receiver prefers to get. The

answer will always be for former, and that is so, even when it is the intention of the sender to deceive the receiver.

A **realistic definition of reading**, then must a) exclude pronunciation, b) include using only the graphic form and its meaning, and c) include receiving, or actually creating a duplicate of the meaning the author had in mind. The reader uses a) the meanings of the printed words and b) the grammar contained in them as **the directions for thinking** to produce that duplicate. Reading is successful to the extent the receiver's personal meaning vocabulary inventory is adequate to the topic and the words of each specific selection, and that is important to keep in mind, because it is absolutely necessary for efficient reading. Yet most reading programs are devoid of any meaning-based vocabulary program. Context analysis should be used as an on-going guide either to select which of several meanings of a word to use, or to check for internal consistency of the duplicate message being created, or both. However, context analysis must not produce a reader's version to replace or adulterate the author's version of the message.

What the reader must do to receive written communication is, fundamentally, the very same thing a listener must do to receive vocal communication. The main difference is that, in listening, the symbols are vocal air waves, which last but momentarily. This causes other differences, some of which are 1) that the listener cannot relisten (as he can reread), 2) he has no control over the speed with which he receives, 3) he cannot pause, though he may wish to, and 4) he may have vocal intonations, facial, and other body expressions to aid (or hinder) him in his efforts objectively to comprehend, and 5) there is no time to use analytic techniques or to change the word form from speech to something else. The message listened to must be received directly, right now. Generally, listening is more difficult than reading.

But listening is receiving, and reading is receiving, and it makes sense that the procedure be essentially the same. Notice that listening is done by a whole-word method. The children **can** handle it. It **does** work. We could, of course, get out those spelling rules (which are about as accurate as the phonic rules) and try to teach the children how to change speech to print to do their listening. But that would be ridiculous, wouldn't it? Why would changing speech to print be ridiculous for listening, when we haven't thought that it is ridiculous to change print to speech in reading? If the words we read disappeared from the page immediately upon our having seen each in turn, (like they do when we listen) would we still be able to read? Of course we would, but it wouldn't be phonic analytic. It **couldn't** be. It wouldn't be by the receiver's pronunciation. It would have to be via whole words, symbol to meaning, with no intervening analytic steps.

Any child whose vision is adequate and who is a good listener (good at getting the speaker's message) easily should be able to be a good reader, using methods that implement the new definition. It should be recalled that we have always thought a child's effective listening ability was an indicator of potential reading capacity. That is so because in listening effectively, he proves he is able to do almost everything that is needed to comprehend effectively. Reading capacity tests and reading potential tests are based on listening comprehension, in fact.

Some Still Ask, "Isn't Pronunciation Necessary?"

After all of the above, there are those who still will ask, "But isn't pronunciation necessary for reading?" No, it is not. Millions of school children learn to "read" by pronouncing words in reading class in school in

the morning, but in the afternoon and evening, in music lessons, learn to read music **without** pronouncing the words of the message contained in the music graphic symbols. They think directly from the symbols. Deaf persons, generally, do not pronounce the words of the texts they read. Millions of persons who read blueprints do not pronounce the words of the messages they get. Nor do those millions and millions who read maps, graphs, charts, mathematical formulae, chemistry, and physics formula, and on and on. They all think directly from the symbols. I recently called a physics teacher and asked him how he read "$a = {}^{F}/_{m}$". He replied that it wasn't easy to tell me because he just thinks a **notion**, and doesn't think it in words. After some consideration, he returned my call and said these are the words you'd have to use:

> "A mass acted upon by force has a certain acceleration in the direction of the force. That acceleration, expressed in feet per second squared (feet per second per second), is determined by dividing the number representing the force measured in pounds by the number representing the mass measured in slugs (a unit of mass such that if a net force of one pound acts on it, it has an acceleration of one foot per second, squared)."

Then he gave an example which clarified it. Obviously neither thinking the notion, nor putting it into words could be done unless he had placed "$a = {}^{F}/_{m}$" into his meaning vocabulary. Neither could musicians read as they do unless they had placed the symbols in their meaning vocabulary. Nor map readers, nor blueprint readers, etc. This suggests the need for a new kind of reading vocabulary which we've done little or nothing about in the past.

Perhaps the most impressive example of pronunciation not being necessary for reading is given by the reading population of China's one billion people. There are **15 different dialects/languages spoken** in China, and generally people who know only one dialect cannot converse with others

who use other dialects. However, there is only **one graphic symbol system** for the entire country, and it is largely pictographic and/or ideographic in a highly stylized way. This symbol system is not alphabetic, nor phonic in the speech-sound/graphic-symbol sense.

Everyone in China writes and reads that one graphic symbol system, regardless of which or how many dialects he speaks. The Chinese reader thinks what the symbols represent. This is true for most Japanese and Koreans as well although some portion of their symbol systems may be similar to an alphabetic system. Chinese and Korean students I've had in class were completely puzzled by the tenacity with which the other students in class hung on to the notion that one must pronounce words to read, and were even more puzzled that they had the notion in the first place. Likewise, say a native Chinese educator and a native Japanese educator of my acquaintance.

Whether we are aware of it or not, readers who are average or above in performance do most of their reading without pronouncing the words. Those who have a habit of mentally pronouncing words, say it is a hindrance to their reading efficiency and speed, and consider it a reading-habit evil from which they'd like to be delivered.

Some Specific Requirements for Teaching Reading as Newly Defined

To teach reading according to the realistic communication-based definition of reading, we will need to:

1. Discontinue the use of pronunciation 1) in the instructional procedure, 2) as an achievement goal, 3) as a means of evaluation, 4) as a means of sharing stories, and 5) in vocabulary work;
2. Discontinue teaching children or requiring children to use phonics;

3. Discontinue the use of "oral reading" as a means of assessing reading performance for sharing stories or for any other reasons;
4. Substitute teaching children **about** phonics for teaching them to use phonics;
5. Substitute story telling for "oral reading" for story sharing;
6. Help children develop a large, versatile experience-based meaning vocabulary which focuses on thinking **only the meaning**(s) as the exclusive automatic response upon seeing a word;
7. Help children learn to identify the grammar in what they read, and understand its function in comprehension;
8. Emphasize comprehension--producing a duplicate of the author's message.
9. Develop ways to assess reading performance and progress which do not require "oral reading;"
10. **Teach children how** to make oral delivery of a written message to an audience which needs the information.
11. Base instruction on a sensible set of principles of instruction.

A few comments should be made about each of these recommendations, and they follow.

Eliminating pronunciation as an element or goal is consistent with the realistic definition of reading. It means that phonics analysis should also be eliminated (it lacks dependability and usefulness, anyhow). It also means that the traditional whole-word look-**say** (printed word-pronunciation) sight vocabulary would not be included either.

Concerning **discontinuing phonics instruction**, I am aware that despite all the phonic utility research, not all teachers are willing to discontinue phonics or may not as they claim, be permitted to. (I wonder, however,

if all the principals, superintendents, school boards that I've had teachers tell me will not permit them to change, **really** will not, or do the teachers just assume they wouldn't.) But, as one student in my 1984 class wrote, "If phonics has to be taught, it is important to be honest with the kids, and to show them how to investigate phonics rules." It is **imperative** that we be honest with them. I would recommend delaying the introduction of phonics as long as possible, at least until late first grade. In the meantime, a meaning-graphic symbol vocabulary should be emphasized. Paul McKee and William Gray would both agree.

Then, if and when phonics is to be introduced, teach **about** phonics. Instruction probably should begin with the phonics of vowels. This should be done in such a way that teachers help children analyze a list of known words such as:

a) car, candy, cap, carry, cold, etc.; **or**

b) east, aid, oats, either, etc.; **or**

c) elm, it, at, ox, up, etc.;

which contain the phonic elements being worked on. In the above cases, the element is respectively a) the speech sound-letter symbol relationship for the letter c, b) the speech sound for adjacent vowels, and c) the sounds for vowels in a closed syllable. Have the children note the common element, and the common sound, or the common **way** the sound is determined, and then you suggest a tentative conclusion. Then children immediately should be asked to look in common reading materials, preferably their current textbooks, for words containing the indicated graphic element, list the words found, and pronounce them to test whether the tentative generalization holds true or not. To the extent it does or doesn't hold true, modify the tentative rule to fit reality, or discard it entirely. This way, children will learn about phonics,

and will know which phonics "facts" are not fact. This procedure is honest. The teacher should know the utility figures obtained by research. The professional integrity of any teacher who would refuse to use such a procedure, for such an outcome, should be highly suspect. In addition to learning about phonics, the children will learn how to do research as well. Any other procedure which would permit children to learn the truth about phonics utility, as the above procedure does, would be satisfactory. I like the research feature of the procedure suggested, and find children do it enthusiastically. The only other tenable option is no phonics instruction of any sort at all.

Eliminating oral reading as an assessment of reading progress, or for any other use, is also consistent with the realistic definition for reading. The words "oral" and "reading" appear to be contradictory. Eliminating oral reading is a necessary consequence of eliminating phonic analysis, pronunciation, and look-say sight vocabulary. Listening to a child's word pronunciation and the speed, fluency, and vocal expression with which he does "oral reading," doesn't really give any insight to the kind of message he's created in his mind as the duplicate of the author's message (which is comprehension). "Oralling" is not reading.

Story telling should be used for sharing stories with children. It is important that children do not get the notion that reading is pronouncing words. Some of each story should be read silently in the presence of the child(ren), so they can observe the way you do your reading. Then tell the story. Children will see that you look at the pages, don't say anything, but when you're finished reading, you know the story well enough to tell it. Isn't that what we'd like to have children do when they read in science, social studies, etc.? Parents should be urged to follow the same procedure. We should stop using such expressions as, "Listen to what it **says** here," etc. If

children ask, "What does this word **say**?" answer "It doesn't say anything, but it makes me think of (and then give a description) when I read it." If they say, "Read me a story," answer, "Nobody can read for anyone else, but I can read it for myself to get the story and then I'll tell it to you."

At this point many teachers ask, "But when do children learn to pronounce the words? They need to learn them for speaking," or they ask, "But then, how do you determine how well the children are reading or whether the child comprehends?" Well, you teach children to send vocal communication in "sending vocal communication" class, not in "receiving graphic communication" class. If there isn't such a class, and there rarely ever is, then start one if you need to. In the past we haven't had such a class, either because children learned pronunciation in reading class, or because we've believed there wasn't any urgent need for formal instruction in learning to speak the language.

Several pages later in this article, **teaching an experience-based meaning vocabulary** will be dealt with. You will then understand that in most cases, the children will have been using the pronunciation of the word in speaking long before it is dealt with in reading vocabulary work. It is only the **automatic pronunciation response** to the printed word that **should be avoided**. Reading requires **only** an **automatic meaning(s) response** to the printed word.

In response to how you determine whether a child comprehends without using pronunciation, new ways of assessing comprehension will be dealt with later.

Instead of using traditional "oral reading," we should consider the notion of "oral delivery of a written message" to an **audience** which needs or wants part or all of the information in the message. That activity should

occur in a separate class time period reserved for development of speaking and listening. It is, after all, **sending** the **vocal** form, not receiving the graphic. Instead of **using** oral reading as a **testing** device, we should **teach children how** orally to deliver written messages (and also how to be a tolerable and effective listener, as well as audience member). I have seen teachers grade children's reading on their oral performance thousands of times. I have never seen a child being **taught** how effectively to orally deliver a written message, except for several graduate and undergraduate students in several laboratory and practicum classes. These students were surprised with the child's response, success, and willingness to do more of it, now that they were **taught** how to do it successfully. In the past, we've **used** "oral reading" but we've never really **taught** it, and we've never really had a willing audience which needed the message. A willing audience is as necessary as the person pronouncing the printed words from the page is.

Then What Is To Be Done in Reading Class?

If phonics is delayed as long as possible, and then only taught **about**, and "oral reading" is done in a separate class for what it **really is**--oral delivery of a written message to an audience--then what is to be done in reading class? A teacher once told me that if she discontinued doing what I recommended she discontinue, 95% of what she does would no longer be done. Many other teachers have voiced the same statement using varying other, but substantial, percentages. Here is a recommendation on what to do instead.

Use the new found time to do meaning vocabulary work and grammar analysis, both of which are absolutely essential to comprehension. The **grammar work** might well begin in a writing-composing class somewhat

separate from reading class and then related to the grammar analysis necessary for reading.

Meaning vocabulary work is grossly neglected in almost all reading programs. Usually we assume the child knows the meaning of whatever he can pronounce. If you are inclined to doubt that statement, think of what we've been doing when a child comes to us with a finger under a word he doesn't know. We **pronounce** it for him. That's all. That's enough, we think. Rarely do we make sure the child thinks of the right meaning. My daughter once said to me, "Dad, when I'm reading for myself it's all right for you to help me with words I don't know by saying such things as 'a large electric kitchen appliance that keeps food cold and makes ice cubes,' and not pronouncing the word for me. But when I'm reading for the teacher, she will ask, 'What does it **say**?' and all I need to know is how to **pronounce** the word. So just tell me what to say here, I **already know** what it means."

Vocabulary instruction should develop a printed-symbol/meaning vocabulary (look-think, if you will) and should involve experiences. If a child cannot recall the memory of an experience (sometimes vicarious) to serve as the meaning for a given word, then that word successfully cannot be a part of vocabulary **instruction** for him. Words for real objects or actions that can be displayed or pictured should be used for the first several hundred words or more, so the model is clear, and is adopted by the children. Later on, words with meanings that can't be demonstrated or pictured very well will have to be dealt with. That isn't easy, but it can be done. However, we know that **every** word **is** definable. Thanks to the persistent questions of students who pushed me on how to do it, I did develop several satisfactory procedures which they could understand were a satisfactory answer. They involve such things as comparisons, contrasts, combining parts of other experience-based

notions, use of synonyms and antonyms, etc. In as many cases as possible, we will need to supply the experiences which will provide insight into the meaning of the word(s). This can be done via contrived classroom experiences, the use of which we should increase, in some schools even as much as a hundredfold. Classroom experiences include resource people. Field trips aren't the only way to get experiences, but they are necessary and their use should be expanded tenfold and more. All provisions for experiences, classroom or field, should be continued up through the grades. Laboratories should be extended down through the grades since they provide personally involved experiences. Some laboratory experiences to provide new meanings should precede the reading of the text in subject matter areas, such as sciences, home economics, music, physical education, etc.

An effective vocabulary teaching procedure involves learning a printed word as a label for an object or a **meaning**, which the child **already knows**, or has just now obtained from experience. The child must first possess a meaning to associate. This is an absolutely necessary prerequisite for vocabulary work. We can't give children the meaning by saying a word like we have been able to give them pronunciations just by saying the word to them.

Ideally, the immediate, automatic and exclusive response to a printed word should be to think its meaning(s). The child should be accurate and certain about the meaning(s) too. Pronunciation should not be involved at all. Such a response can be assessed for correctness by having the child describe (but never name) what he's thinking of, e.g., "an electric office machine with about 50 buttons to press to print letters and words on paper. It is easy to carry in a case that belongs to it." Obviously, the words he's looking at are "portable electric typewriter." Like the Chinese, he could call it

any of fifteen different pronunciations or more, or nothing at all, none of which really matter as long as he's **thinking the right meaning**. Like the musician . . . , like the construction worker reading blueprints . . . , the map reader . . . , the deaf . . . , etc., when done as described above, children will have words with meanings but no pronunciations, instead of words with pronunciations but no meanings. Quite often, if not almost always, however, they will know the pronunciation for each meaning and even use it in speaking, but they will not necessarily know that "this" pronunciation goes with "that" printed word.

In such a vocabulary teaching procedure, you'll likely need pictures, or actual objects, so the children will know what is being worked on. You'll also need word cards (flash cards, but with a new use). You'll want to **be sure** the object, real or pictured, is **within the children's experience**. You can do that by having them answer **only** "**Yes**" or "**No**," to questions such as:

Have you ever seen or used one of these?

Do you know where you would find this?

Do you know what it is made of (or how it is made)?

Do you know what it is used for (or how it is used)?

The questions should be designed clearly to suggest a **Yes** or **No** answer, so children are not encouraged to pronounce. At first they may want to say names. Pronunciation should not be accepted or even acknowledged and should not be taught or associated with the printed word in any way. (Later on, when oral delivery of a written message to an audience is taught, then pronunciation is a necessary concern, but not in reading class.) However, since the vocabulary is done only with words associated with experiences, they frequently will know the pronunciation anyway.

It would also be good to ask, "Is this a good description of it?" and then give a good description. It makes assurance doubly sure that the object or notion is (or is not) within their experience when they answer, and it also gives the child a model description to use later on in meaning vocabulary assessment when he will need to describe (but not name) what given words make him think of. A variety of activities would be appropriate, such as 1) matching the words with the pictures/objects; 2) being given the description and finding the correct word card; 3) looking at word card only, describing and then matching, at which point, if done successfully, the pictures should be removed, etc.

At this stage in the procedure, children, using the word cards, could help each other review, refresh, reinforce, etc. For such purposes the word on one side and the description on the other would be very helpful. Eventually, one child could give the description, the other could write the word. This, incidentally, is a new way to do spelling, and it is realistic! It is writing words that match meanings. Or do you pronounce the words before you spell them when you write? As we've been teaching spelling, children are taught to produce the written form of spoken words. We seldom do that in real-life writing. What we really do is produce written words for meanings, thoughts, and ideas.

Comprehension should be emphasized because the words, comprehension and reading, are in a large sense, synonymous. All other activities that are involved in reading are involved because they are necessary to produce comprehension. Comprehension is **the** end product of reading, and reading cannot be said to have occurred if comprehension does not result, no matter what else is done, or how well it is done. Comprehension results when the reader produces in his own mind a duplicate of the message the author

had in his mind to communicate, for which he wrote the words to be read by someone else.

For **assessing comprehension**, we will, first of all, need brief interesting stories with the message to be comprehended contained in the words (not in the pictures, as is so typical of reading materials for the early grades). In the past, stories were said to be written primarily to introduce a controlled number of new words, to repeat the use of those new words at a controlled rate, to repeat the use of previously introduced words at a controlled but slowly decreasing frequency, etc., etc., to a list of 20 or more other constraints.[1] That the resulting assemblage of words had little or no story to it is not surprising. If there is no story or message in the words, there is no possibility for reading comprehension.[2] Reading comprehension and picture comprehension are two different things.

Stories written primarily for comprehension are easier to write. There is another set of constraints, of course, such as common decency, appropriate level of topic, a clear cut message or story, proper vocabulary, language and grammar, clarity, accuracy, etc. Most of those help improve the story. Children consider such stories a delight and a welcome change.

Given good stories written for comprehension, then we will need new ways to assess comprehension. In one hour's time in one of my graduate practicum classes, the students and I thought of at least ten different ways to do it; because we forced ourselves into it , we weren't going to let go until we

---

[1] Grief, unpublished list of 25 constraints placed upon publishers of basic reading test materials, either by teachers, the public, or even themselves.

[2] There is also no possibility for comprehension when children attempt to read experience records they have helped to author. Having already possessed the message before it was written, it is unnecessary to read to duplicate the author's message. They already have the original message.

came up with some. **None** of the ten ways **involved pronunciation or oral reading**. And none involved silly, less than incidental questions either.

Some examples of **ways to assess comprehension which do not require oral reading** are a) in this story there may be one or two words which do not make any sense with the story. Find such words and tell why they don't fit; b) the same as a), but find such words, decide on other words the author must have intended to use instead, and tell why you chose them; c) here is about 2/3 of a story. Read it and decide on an ending which will fit with the part you read; d) in this story, if _____ hadn't happened and _____ had happened instead, would any other parts of the story have to be changed? If so, which parts are they and tell why or how they would have to be changed.

Children should be taught how to read for such purposes as are required of them in all school reading. This requires they know what the purpose is before they read and one of the best ways to do so is to show them, before they read, the questions they'll be answering after they read.

Principles of instruction are important guidelines which set the requirements for or limits to what we teach and how we teach reading. Foremost among such a sensible set of principles should be these:

1. Each reading instruction objective must concern something the children will need the rest of their lives to read.
2. Planning for reading instruction should begin with objectives which name something the children need to learn, discover, or develop for the first time, or need to reinforce or review.
3. Procedures and materials used must be second in priority to and subordinate to the objectives, and must be designed to help the children achieve the objective.

4. Every child must succeed in every reading lesson taught.
5. Children must learn that reading is a language process that must result in meaning.
6. Everything recommended to children to do to read must work with perfection.

The first principle above is probably the most important one. It determines the usefulness of the objectives. When was the last time you needed to know the letters that were left out of **cannot, will not, or have not** (and that were replaced by an apostrophe) to make **can't, won't or haven't** in order to read? Or, the names of the letters in order to read? On the other hand, when was the last time you **didn't need** to know the meanings of words in order to read? Or, the function of the subject and predicate, in order to read?

In the past, reading programs had many lessons on both of the former and very few on either of the latter. There are, of course, many other things we **do not need** to read which vigorously were taught, like the consonant blends. And there are many other things like configuration recognition that we **do need**, but weren't taught. Being sure that we teach children things they need for the rest of their lives to read helps insure worthwhile, functional objectives.

Will You Help Change?

If you are well satisfied with the results children achieve in your local reading programs, or in regional and national programs, don't change a thing. The sad thing is that many, many teachers are satisfied, even proud of how they teach children to read, yet their results are no better than anyone

else's results are. They produce as many failures as they do successes. Indeed, the successes very well may be despite the teaching.

For my part, when our reading programs produce the need for, and the existence of corrective and remedial programs almost as large and as costly as our regular reading instruction programs, I am not satisfied. When I can say, "Fully 40% of today's elementary school children have reading problems severe enough to require some formal remedial program," to people at reading convention meetings and teachers in graduate classes after year after year and never be challenged, I am not satisfied. When the U.S. Department of Education figures show there are 58 million people age 18 and over who are functionally illiterate (conservatives say 44 million), I am not satisfied.

Now, if you aren't satisfied, then you ought to begin to do something about it, and that means you'll have to make some changes.

Such changes aren't simply a matter of spending vast amounts of money, time, and effort on what we currently are doing. We've already done that. In the past 30 years, we have spent huge amounts of money--hundreds and hundreds of millions--on local, state, and federally funded programs. Many, many teachers have spent time and money to obtain Master's degrees in reading. We've employed tens and tens of thousands of diagnosticians, remedial reading specialists and learning disability specialists. We have seen a proliferation of *status quo* materials in quantities and varieties enough literally to bury us. Many believe all these efforts did not improve our success in teaching children to read, in fact, some believe these efforts might well have compounded the problem.

What we need to do is something we've had little of, if any at all, in the past. We need the development and **adoption of realistic new goals**, and the **development and use of new emphases, procedures, and**

materials to achieve those goals. We need to **develop new and sensible principles of instruction** and use them to guide our teaching.

I firmly believe that if we really wanted to, and put our minds to it, we could, by the year 2000, be teaching children to read so effectively that every child who is not intellectually handicapped would be able to learn to read efficiently, and we no longer will need any corrective or remedial programs at all. Crazy? Not at all.

Consider that many of us, and certainly our parents, can recall when it would have been considered crazy to believe that by 1988 there would be no tuberculosis, no smallpox **anywhere**, that there routinely would be outpatient appendectomy surgery, outpatient cataract surgery, lenses implanted in eyes, organ transplants, stainless steel, and/or plastic hip, knee, and finger joints, automobile engines made almost entire of plastic and ceramic components, or absolutely painless, non-invasive, diagnostic, radar-type techniques which enable us to watch the inside of our own beating hearts on a monitor screen, or laser "knives" in surgery and painless laser "welding" of detached retinas back into place, just to name a few. Crazy notions all, just a few years ago. Yet, all of them now exist and most are even relatively commonplace today.

We even have real hopes that cancer and the common cold will be conquered and eliminated. In fact, so many "crazy" unbelievables and impossibles have been accomplished in medicine and and all other fields that we are beginning to believe that almost anything can be done. Why not reading?

By the year 2000 everyone without an intellectual handicap can be able to read efficiently and it can be done with only a fraction of the effort and

expense needed from here on out to conquer either cancer or the common cold.

Lessons from Industry and Medicine

We could take a lesson from the medical and industrial worlds which a) makes great, expensive efforts constantly to change and improve products, procedures, and maintenance, **to solve the problems of the moment**. Also, b) they make vastly larger and more expensive efforts to develop improved and new models, preventive medicine or maintenance, improved treatments, etc., especially to **eliminate old problems entirely**. The progress they make in even 5 years' time is monumental. It is important to note that they **believe** they can eliminate problems entirely for the future, so they do.

Reading educators **do not seek constantly** to make changes and improvements to solve the problems of the moment. They resist change. Yes, there have been vast expenditures in time, effort, and money in attempting to cure the ills, but we have not succeeded because our remedial instruction is almost identical to our regular instruction (which hasn't changed substantially for 60 years or more), except for a great increase in the degree of intensity and determination in using the method. All to the increased distress of children.

We **spend precious little effort or money** to develop new models, preventive instruction, or to establish new goals, procedures, and principles of teaching **to eliminate old problems entirely**.

Do reading teachers really **believe** they can eliminate reading problems entirely for children in the future, say by the year 2000? Do **you** believe it can be done? Do you know of anyone else who does? Even one? In the past

three years I've asked teachers I've met at conventions, schools, and in my classes and I've found **no one** who really believes we can eliminate reading failure by the year 2000, or even ever. Most of them have a sort of disgusted look on their faces like would accompany a "How stupid can you be?" response. There are always those three or four in a group who **hope** we can, however.

If we are going to eliminate reading failure we are **first** going to have to **believe** it can be done. **Then**, we must **have some dreams** and believe we can find or develop the procedures to make those dreams come true, and **also**, we must have a **willingness to try** some fundamental changes in what we do. If we don't have these, we won't even try. Instead we'll stay right where we are (and have been for decades), spending our efforts and money preserving and defending the *status quo* that has produced as much failure as success. We will continue to preserve and defend the reading instruction, which involves a "Topsy" system which grew, not out of research nor from a common sense, realistic base, but much as a malignancy does, out of control, and with disastrous consequences.

May this article be the beginning of a new era for those who read it. Dream some, and

> "Hang on to dreams
> For if dreams die
> Life is but a broken winged bird
> That cannot fly."
>
> Langston Hughes

BIBLIOGRAPHY

Affleck, Muriel A. "Phonic Principles in Intermediate Reading," Reading Improvement, 1969, Vol. 6, pp. 69-77.

Aukerman, Robert C. Approaches to Beginning Reading. New York: John Wiley and Sons, 1984.

Bailey, Mildred Hart. "The Utility of Phonic Generalizations in Grades One Through Six," The Reading Teacher, Vol. 20, February 1967, pp. 413-418.

Bieri, Alan. "Utility of Phonics Generalizations at the College Level," Unpublished Master's Thesis, Rutgers University, 1977.

Burmeister, Lou E. "Vowel Pairs," The Reading Teacher. February 1968, pp. 445-52.

Burrows, Alvina, and Lourie, Zyra. "When Two Vowels Go Walking," The Reading Teacher, Vol. 17, 1963, pp. 79-82.

Caldwell, Edward C.; Roth, Sandra R.; and Turner, Ralph R. "A Reconsideration of Phonic Generalizations," Journal of Reading Behavior, X, 1978, pp. 91-96.

Clymer, Theodore. "Utility of Forty-three Phonic Generalizations," Unpublished paper reported on and distributed at IRA-NCRE Convention, St. Louis, May 5, 1961.

Clymer, Theodore. "The Utility of Phonic Generalizations in the Primary Grades," The Reading Teacher, Vol. 16, January 1963, pp. 252-258.

Dzama, Mary Ann. "Comparing Use of Generalizations in Phonics in LEA, Basal Vocabulary," The Reading Teacher, February 1975, pp. 466-472.

Emans, Robert. "The Usefulness of Phonic Generalizations Above the Primary Grades," The Reading Teacher, Vol. 20, February 1967, pp. 419-425.

Gentile, Hamil, and Blanchard, Reading Research Revisited, Columbus, Ohio: Chas. E. Merrill Publishing Co., 1983, pp. 126-128.

Greif, Ivo P. "A Study of the Pronunciation of Words Ending in a Vowel-Consonant-Final E. Pattern," The Reading Teacher, December, 1980, pp. 290-292.

Greif, Ivo P. "When Two Vowels Go Walking, They Should Get Los," The Reading Teacher, January 1981, pp. 459-460.

Greif, Ivo P. A Study of the Pronunciation of Single-Syllable, Closed-Syllable Words. ERIC ED #278 942, July 1987, RIE.

Greif, Ivo P. Another Study of the Pronunciation of Words Ending in a Vowel-Consonant-Final E Pattern, and Similar Patterns. ERIC ED #284 197, December 1987, RIE.

Greif, Ivo P. A Study of the Pronunciation of Words Containing Adjacent Vowels. ERIC ED #277 982, June 1987, RIE.

Greif, Ivo P. A Study of the Pronunciation of Single-Syllable Words Having the Only Vowel as the Final Letter. ERIC ED #277 984, June 1987, RIE.

Greif, Ivo P. A Study of the Usefulness of Two Syllabification Rules. ERIC ED #276 983, May 1987, RIE.

Greif, Ivo P. The Utility of the "Vowels in Open Syllable" and "Vowels in Closed-Syllable" Phonic Rules When Pronouncing Two-Syllable Words. ERIC ED #277 985, June 1987, RIE.

Greif, Ivo P. The Utility of the "Vowels in Open-Syllable" and "Vowels in Closed Syllable" Phonic Rules when Pronouncing Three-Syllable Words. ERIC ED #277 983, June 1987, RIE.

Greif, Ivo P. A Study of the Vocabulary Adequacy of College Education Majors for Reading Reader's Digest. ERIC ED #276 985, May 1987, RIE.

Greif, Ivo P. A Study of the Adequacy of College Students' Vocabulary for Reading The Daily Paper. ERIC ED #276 984, May 1987, RIE.

Vine, Ruth. "When There Are Two Vowels Side by Side, Does the Rule 'When Two Vowels Go Walking . . .' Apply More Often Than Not in First and Second Grade Basal Reading Series?" Master's Thesis, Kean College, New Jersey, 1978, ERIC ED 159-598.